

## C L A I M S

1. A method for packing agricultural produce comprising the steps of:  
providing a container having at least one communications aperture formed in a wall thereof;  
providing at least one flexible controlled permeability bag within said container;  
providing at least one bag aperture in said at least one flexible controlled permeability bag in general registration with said at least one communications aperture;  
sealing said produce inside said at least one flexible controlled permeability bag within said container, while leaving said at least one bag aperture and said at least one communications aperture open;  
providing atmosphere treatment within said at least one bag via said at least one bag aperture and said at least one communications aperture; and  
sealing at least one of said at least one bag aperture and said at least one communications aperture.
2. A method for packing agricultural produce according to claim 1 and wherein said atmosphere treatment comprises vacuum cooling.
3. A method for packing agricultural produce according to claim 1 and wherein said atmosphere treatment comprises fumigation.
4. A method for packing agricultural produce according to claim 1 and wherein said atmosphere treatment comprises gas treatment.

5. A method for packing agricultural produce according to claim 2 and wherein said atmosphere treatment comprises fumigation.
6. A method for packing agricultural produce according to claim 2 and wherein said atmosphere treatment comprises gas treatment.
7. A method for packing agricultural produce according to claim 3 and wherein said atmosphere treatment comprises gas treatment.
8. A method for packing agricultural produce according to claim 1 and wherein said at least one communications aperture formed in a wall thereof is formed in a sealing layer adhered to a wall of said carton.
9. A method for packing agricultural produce according to claim 1 and wherein said flexible controlled vapor selective permeability bag comprises a gas impermeable bag.
10. A method for packing agricultural produce according to claim 1 and wherein said flexible controlled vapor selective permeability bag comprises a gas permeable bag having selected permeability characteristics adapted to a given type of produce.
11. A method for packing agricultural produce according to claim 1 and wherein said providing at least one bag aperture in said flexible controlled permeability bag in general registration with said at least one communications aperture comprises:  
inserting said bag into said container;

at least partially filling said bag with said produce;  
adhering said bag to said container adjacent said at least one communications  
aperture; and  
aperturing said bag generally in registration with said at least one communications  
aperture.

12. A method for packing agricultural produce according to claim 8 and wherein said  
providing at least one bag aperture in said flexible controlled permeability bag in general  
registration with said at least one communications aperture comprises:

inserting said bag into said container;  
at least partially filling said bag with said produce;  
adhering said bag to said container adjacent said at least one communications  
aperture; and  
aperturing said bag and said sealing layer in a single operation.

13. A method for packing agricultural produce according to claim 1 and wherein said  
sealing at least one of said at least one bag aperture and said at least one communications  
aperture comprises attaching an adhesive sticker over said at least one communications aperture  
from the outside of said container.

14. A method for packing agricultural produce according to claim 1 and wherein said  
flexible controlled gas selective permeability bag comprises a gas impermeable bag.

15. A method for packing agricultural produce according to claim 1 and wherein said

flexible controlled gas selective permeability bag permeability bag comprises having selected permeability characteristics adapted to a given type of produce.

16. A method for packing agricultural produce according to claim 1 and wherein said sealing at least one of said at least one bag aperture and said at least one communications aperture comprises attaching a cap over said at least one communications aperture from the outside of said container.

17. A system for packing agricultural produce comprising:  
at least one container having at least one communications aperture formed in a wall thereof;  
at least one flexible controlled permeability bag within said container, said at least one bag having an aperture in general registration with said at least one communications aperture and being adapted for containing said produce inside said at least one flexible controlled permeability bag within said container, while leaving said at least one bag aperture and said at least one communications aperture open;  
treatment functionality, operative for providing atmosphere treatment within said at least one bag via said at least one bag aperture and said at least one communications aperture;  
and  
sealing functionality for sealing at least one of said at least one bag aperture and said at least one communications aperture.

18. A system for packing agricultural produce according to claim 17 and wherein said atmosphere treatment comprises vacuum cooling.

19. A system for packing agricultural produce according to claim 17 and wherein said atmosphere treatment comprises fumigation.
20. A system for packing agricultural produce according to claim 17 and wherein said atmosphere treatment comprises gas treatment.
21. A system for packing agricultural produce according to claim 18 and wherein said atmosphere treatment also comprises fumigation.
22. A system for packing agricultural produce according to claim 18 and wherein said atmosphere treatment also comprises gas treatment.
23. A system for packing agricultural produce according to claim 19 and wherein said atmosphere treatment also comprises gas treatment.
24. A system for packing agricultural produce according to claim 17 and wherein said at least one communications aperture formed in a wall thereof is formed in a sealing layer adhered to a wall of said carton.
25. A system for packing agricultural produce according to claim 17 and wherein said flexible controlled permeability bag comprises a modified atmosphere bag.
26. A system for packing agricultural produce according to claim 17 and wherein said flexible controlled permeability bag comprises a gas permeable bag having selected permeability

characteristics adapted to a given type of produce.

27. A system for packing agricultural produce according to claim 17 and wherein said at least one bag aperture is formed in said flexible controlled permeability bag in general registration with said at least one communications aperture by the following functionality:

inserting said bag into said container;

at least partially filling said bag with said produce;

adhering said bag to said container adjacent said at least one communications aperture; and

aperturing said bag generally in registration with said at least one communications aperture.

28. A system for packing agricultural produce according to claim 26 and wherein said at least one bag aperture is formed in said flexible controlled permeability bag in general registration with said at least one communications aperture by the following functionality:

inserting said bag into said container;

at least partially filling said bag with said produce;

adhering said bag to said container adjacent said at least one communications aperture; and

aperturing said bag generally in registration with said at least one communications aperture.

29. A system for packing agricultural produce according to claim 17 and wherein said sealing at least one of said at least one bag aperture and said at least one communications

aperture is effected by the following functionality:

attachment of an adhesive sticker over said at least one communications aperture from the outside of said container.

30. A method for loading a refrigerated container having a refrigeration unit producing a flow of forced air and a flow of return air under negative pressure in order to provide maximum loading and cooling efficiency, the method comprising:

loading palletized ventilated cartons having ventilating apertures formed in walls thereof into a refrigerated shipping container in a manner such that there is defined a central plenum between rows of loaded pallets; and

selectively blocking air passages inside said container such that said forced air flow is directed principally through said plenum and through interstices between ones of said ventilated containers and thus generally horizontally through said ventilating apertures.

31. A method according to claim 46 and wherein:

a forced air flow from said refrigeration unit is supplied along channels formed in a floor of the container and extending parallel to a longitudinal axis thereof;

at least a portion of said forced air output rises through spaces between adjacent floor elements in the floor of the shipping container, except where physically blocked and relatively unimpeded from a channel underlying said plenum; and

at least a portion of said forced air output rises relatively unimpeded from open ends of said channels at a back end of the container into back plenum defined rearwardly of said rows of pallets

32. A loaded refrigerated container having a refrigeration unit producing a flow of forced air and a flow of return air under negative pressure in order to provide maximum loading and cooling efficiency, the loaded container also comprising:

palletized ventilated cartons having ventilating apertures formed in walls thereof positioned in said refrigerated shipping container in a manner such that there is defined a central plenum between rows of loaded pallets and wherein

air passages inside said container are selectively blocked, such that said forced air flow is directed principally through said plenum, through interstices between ones of said ventilated containers and thus generally horizontally through said ventilating apertures.

33. A loaded refrigerated container according to claim 32 and wherein:

a forced air flow from said refrigeration unit is supplied along channels formed in a floor of the container and extending parallel to a longitudinal axis thereof;

at least a portion of said forced air output rises through spaces between adjacent floor elements in the floor of the shipping container, except where physically blocked and relatively unimpeded from a channel underlying said plenum; and

at least a portion of said forced air output rises relatively unimpeded from open ends of said channels at a back end of the container into back plenum defined rearwardly of said rows of pallets